GS600 User manual

DOD GS300/GS600 CAR BLACK BOX

- FULL HD 1920 x 1080@30FPS
- Loop recording
- Wide vision angle 120 degree
- AV OUT or HDMI output
- Collision Data protection

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Instructions before use

Preface

This user manual will describe the usage of this product in details and at the same time provide comprehensive information including usage, operation, installation instructions and specification, etc. Please read the manual carefully and keep it properly. We hope our product will satisfy your need and provide you with long-term services.

Product Guarantee

This product is approved by ISO9001:2000 International Quality Standard and certified with FCC, CE and SGS. Our customers can use this product free of apprehension.

Copyright infringement Warning

Please note this product is for personal use only. The forms of usage should not offend or infringe international or domestic copyright laws and regulations. All recorded videos should be for personal use only. Please note that using this product for recording of occasions like shows, exhibitions or commercial activities will infringe others' copyrights or legislation rights.

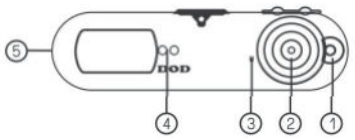
Check Product Accessories

Please check whether the following accessories are present before use

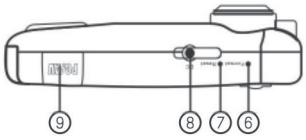
1. Vehicle Power Cable (4M) x1
2. Holder x1
3. AV Video Cable x1
4. USB Cable x1
5. Remote Controller x1
6. User Manual x1

Product Structure

Front View

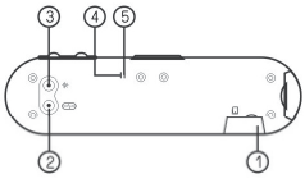


Bottom View

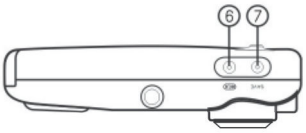


1. Laser light
2. Lens
3. Microphone
4. Remote Controller Receptor
5. HDMI Port
6. Format Button
7. Forced Shutdown Button
8. DC Power Port
9. USB Port/AV Output

Rear View

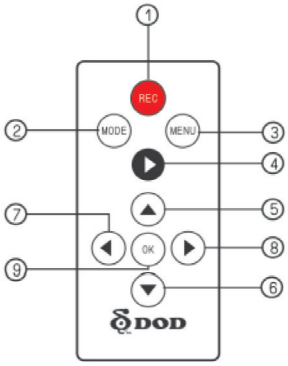


Top View



1. Micro-SD Card Slot
2. Halt Recording/USB Switch
3. Laser Ray Button
4. Blue Indicator Light (GPS)
5. Red Indicator Light (Recording)
6. Audio Switch
7. Data Protection Button

Remote Controller Image

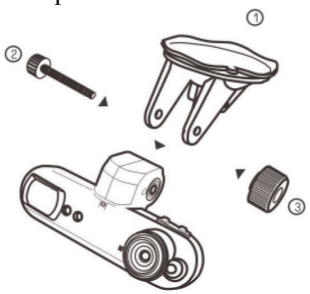


1. Recording Button
2. Mode Button
3. Menu Button
4. Playback Button
5. Up Button
6. Down Button
7. Left Button
8. Right Button
9. OK Button

Installation

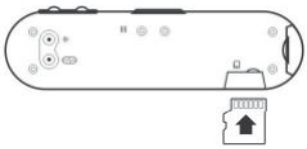
Holder Installation

Combine the suction cup holder with the host device



Memory Card Installation (Optional Purchase)

Install the Micro SD card into the drive recorder in the specific direction.



Installation on Your Vehicles

· Step 1

Install the suction cup holder by having it sucked onto the windshield with the lens facing forward.

· Step 2

Plug the vehicle power cable in the cig lighter, and plug the other end to the DC port of the drive recorder.

· Step 3

After installation, you may arrange the surplus power cable and hide it inside Column A.

· Step 4

Switch ON the power, a red light blinking means it is under recording mode; press the infrared-red laser ray button and adjust the lens direction according to the position of the red dot to complete the installation.

Transmit the video to the vehicle monitor

Video can be transmitted through AV IN interface if there are video equipments (vehicle monitor, GPS, and Satellite TV, etc.). The following is an example on transmitting the video to the monitor by using GPS with build-in AV IN function.
Please skip the steps if you do not have these equipments.

· Step 5

Insert the AV terminal to the video equipment, plug the other end to PC/AV port of the drive recorder, adjust the video equipment to AV channel, and insert the vehicle power cable to complete the installation.

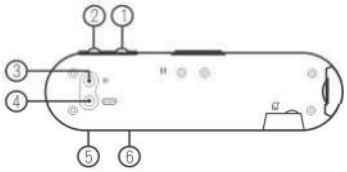
Transmit the video to LCD TV

You can also transmit the video from the drive recorder to your LCD TV at home to playback the data or adjust the setting. The steps are as follows:

1. Your video equipment should have AV IN or HDMI ports.
2. Connect AV cable or HDMI cable (optional purchase) to the video equipment and the drive recorder.
3. Connect the home use transformer (optional purchase) to the drive recorder and the house power socket.
4. Adjust the channel of the video equipment to AV or HDMI.
5. Installation completed.

Remote controller can be used after completing installation, please see page 08

Component Descriptions



1. **SAVE** - Data Protection Button
   Press SAVE button, and you can manually set the data under recording to protection mode, so as to prevent it from being overwritten.

2. Audio Button
   Press Audio button to select whether to record the sound during recording.

3. ✳ Laser Ray Button
   Pressing and holding the button, the red dot projected is the area which is being recorded; it is used for adjusting the installation position of the drive recorder.

4. (REC\USB) Halt recording / USB switch
   Pressing and holding for 2~3 sec., the red light will stop blinking and become constant indicating recording stopped. Pressing and holding again for 2~3 sec., red light will start blinking again and recording will continue.
   Connect the drive recorder to the computer with USB cable, and press for 2~3 sec. to change to USB mode to proceed with data access.

5. **Format** -Format Button
   Pressing and holding for 2~3 sec., the red and blue lights will start blinking simultaneously indicating formatting. All data in the memory card will be cleared; after finishing clearing, the red light will blink and continue recording.
6. **Reset** - Forced Shutdown Button
   Press the RESET button if crash occurred owing to improper operation. The drive recorder will be forced to shut down and all indicator lights will be switched off. Plugging the power out and in again will resume recording.

Menu Operation

Transmit the video to the monitor (Page12,13) before proceeding to menu operation, and use the remote controller to operate (Page08).

Image Param

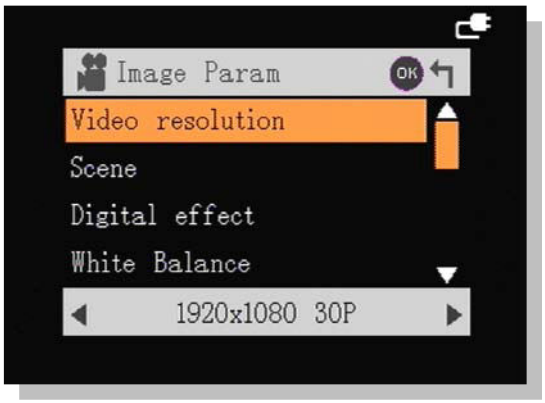
◆Video resolution

Video resolution can be configured during recording. Higher value means higher resolution and better picture quality, and the storage capacity consumption will be relatively higher.

FPS is Frame Per Second during recording. Higher FPS means smoother video.

Remove Controller MENU Button→【Image Param】Menu→【Video resolution】→【1920x1080 30P】*/【1440x1080 30P】/【1280x720 30P】/【848x480 60P】/【848x480 30P】/【640x480 30P】

*Setting Value

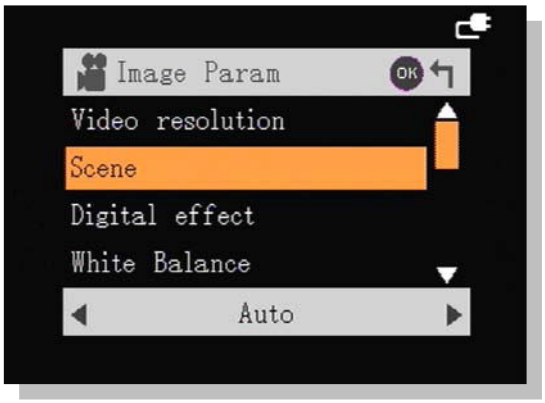


◆Scene

Scene setting can be done to allow shooting to be more conformed to the surroundings and achieve optimum shooting effect. Select [AUTO] to allow the recorder to choose the setting automatically.

Remove Controller MENU Button→【Image Param】Menu→【Scene】→【Auto】*/【Night Portrait】/【Night Scenery】/【Sports】/【Landscape】/【Portrait】/【Sunset】

*Setting Value

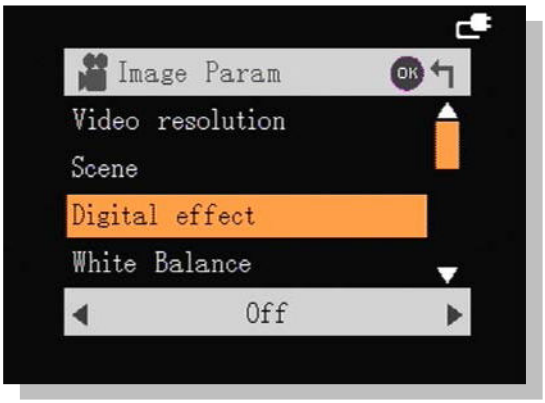


◆Digital effect

This effect produced by this setting can achieve certain playfulness, and changes in color are more apparent.

Remote Controller MENU Button→【Image Param】Menu→【Digital effect】→【Off】*/【Art】/【Sepia】/【Negative】/【Monochrome】/【Vivid】

*Setting Value

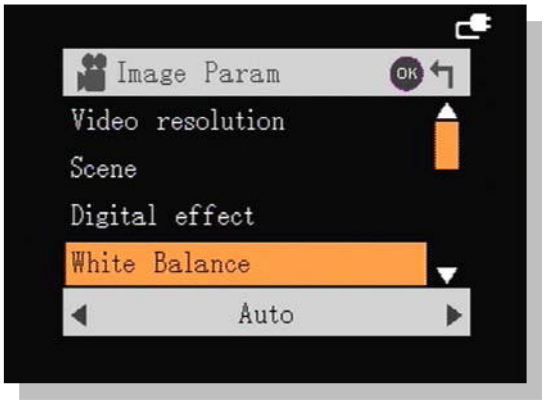


◆White Balance

Selecting [AUTO] under normal circumstances can choose white balance. If [AUTO] mode cannot produce natural colors, please use appropriate light conditions to change White Balance setting.

Remote Controller MENU Button→【Image Param】Menu→【White Balance】→【Auto】*/【Incandescent】/【Sunny】/【Cloudy】/【Fluorescent】

*Setting Value



◆ISO

According to the brightness during shooting, selecting [AUTO] can set optimum ISO sensitivity.

Remote Controller MENU Button→【Image Param】Menu→【ISO】→【Auto】*/【100】/【200】/【400】/【800】/【1600】

*Setting Value

◆EV

If “EV” is adjusted to + side, you can avoid under-exposure, or dark objects as shooting against a bright background. If “EV” is adjusted to – side, then you can avoid over-exposure, or bright objects as shooting against a dark background or at night.

Remote Controller MENU Button→【Image Param】Menu→【EV】→【-2.0】/【-1.7】/【-1.3】/【-1.0】/【-0.7】/【-0.3】/【0】*/【+0.3】/【+0.7】/【+1.0】/【+1.7】/【+2.0】

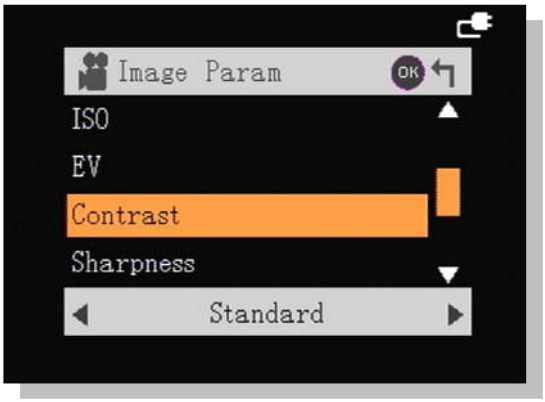
*Setting Value

◆Contrast

Contrast indicates the degree of black color in proportion to white color on the screen. The higher the contrast, dark color will appear darker, and bright color will appear brighter. It is suitable for identifying the number plate in the driving record.

Remote Controller MENU Button→【Image Param】Menu→【Contrast】→【Soft】/【Standard】*/【Hard】

*Setting Value

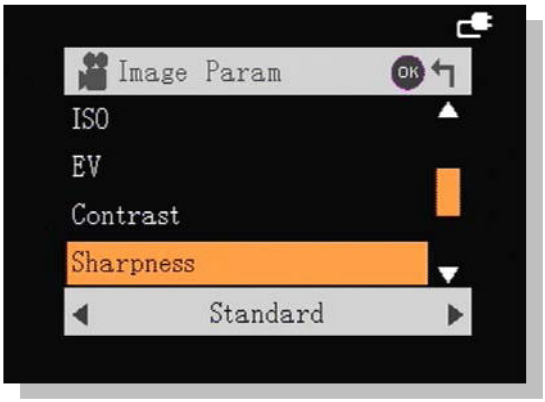


◆Sharpness

Sharpness means the significant degree of contour image during shooting. The higher the sharpness the more obvious the contour image of characters and scene, it is very useful for face recognition during drive recording.

Remote Controller MENU Button→【Image Param】Menu→【Sharpness】→【Soft】/【Standard】*/【Hard】

*Setting Value

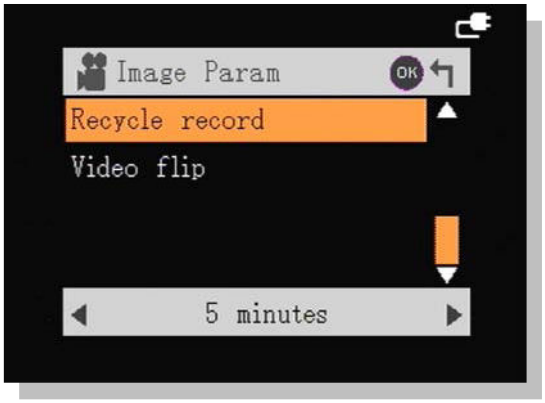


◆Recycle record(GS600)

Setting Recycle record can, under limited memory card, repeatedly use the new data to overwrite the old data, in order to achieve non-interrupted recording result.

Remote Controller MENU Button→【Image Param】Menu→【Recycle record】→【No】/【1 minute】/【5 minutes】*/【10 minutes】/【15 minutes】/【30 minutes】/【45 minutes】

*Setting Value. It means saving data every 5 minutes, relatively each cycle will overwrite 5 minutes of old data.

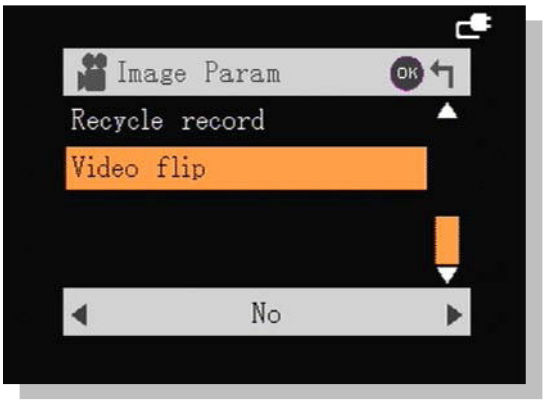


◆Video flip

Turn the menu and image vertically to 180 degree. You can also install the drive recorder upside down 180 degree to fit your requirement.

Remote Controller MENU Button【Image Param】Menu→【Video flip】→【No】*/【Yes】

*Setting Value



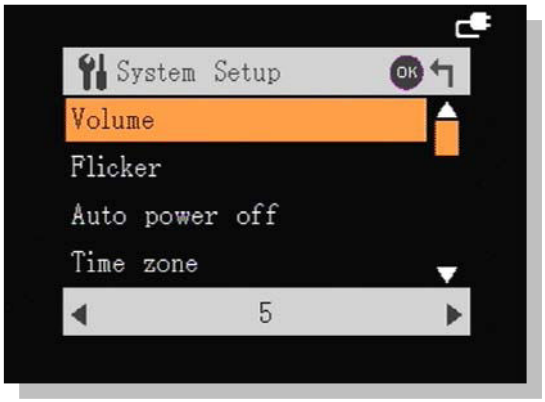
System Setup

◆Volume

Adjust the volume of build-in speakers of the host device.

Remote Controller MENU Button→【System Setup】Menu→【Volume】→【0】/【1】/【2】/【3】/【4】/【5】*/【6】/【7】/【8】/【9】/【10】

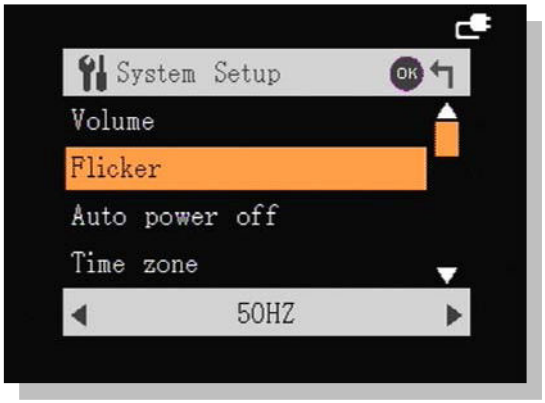
*Setting Value



◆Flicker
Select 50Hz if the power voltage of the country is 220V. Select 60Hz if the power voltage is 50Hz.

Remote Controller MENU Button→【System Setup】Menu→【Flicker】→【50Hz】*/【60Hz】

*Setting Value

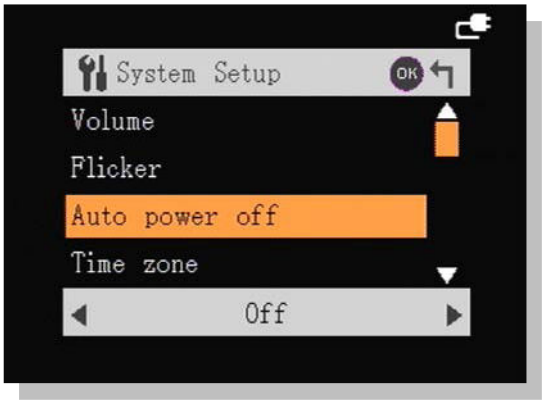


◆Auto power off

When the drive recorder stop recording, if “AUTO POWER OFF” was set, it will automatically shut off after going through the set time.

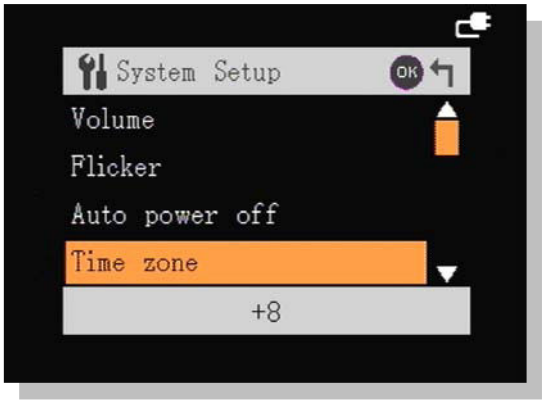
Remote Controller MENU Button【System Setup】Menu→【Auto power off】→【Off】*/【1 minute】/【3 minutes】/【5 minutes】

*Setting Value



◆Time zone(GS600)
Please set your area time zone according to Greenwich Mean Time.
Taiwan is GMT +8, please set GMT to +8.

Remote Controller MENU Button→【System Setup】Menu→【Time zone】→【-12】/【-11】/【-10】/【-9】/【-8】/【-7】/【-6】/【-5】/【-4】/【-3】/【-2】/【-1】/【0】/【+1】/【+2】/【+3】/【+4】/【+5】/【+6】/【+7】/【+8】*/【+9】/【+10】/【+11】/【+12】
*Setting Value



◆G Sensor sens. X.Y.Z(GS600)

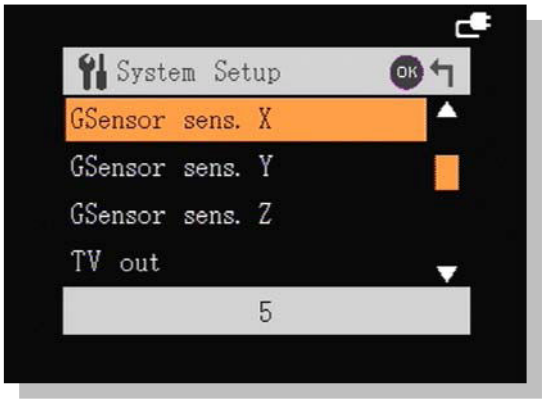
When there is a collision, with the help of the changes in XYZ curves, G Sensor or Gravity Sensor can determine the direction of the collision and simultaneously set the recorded data to protection mode, and the data will not be overwritten by circulated recording. Adjust the sensitivity parameter of XYZ axles. [OFF] sensitivity means G Sensor function is OFF, so the drive recorder will not automatically set the data to protection mode, and manual setting will be needed. **X Left and right changes during acceleration.**

Y：Back and forth changes during acceleration.

Z：Up and down changes during acceleration.

Remote Controller MENU Button→【System Setup】Menu→【G Sensor sens. X.Y.Z】→【Off】/【1】/【2】/【3】/【4】/【5】*/【6】/【7】/【8】/【9】/【10】

*Setting Value

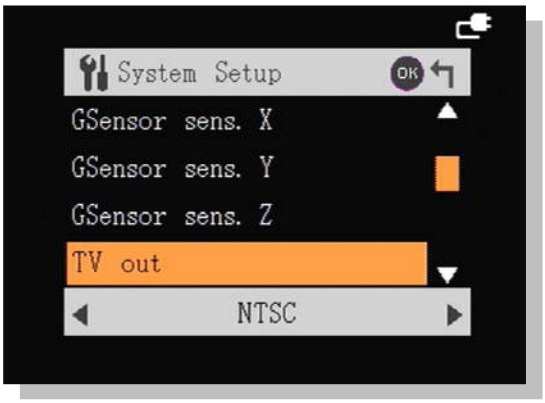


◆TV out

This setting can be adjusted when you use AV cable or HDMI cable to transmit the video to the monitor. Select local video specifications NTSC or PAL to solve the problem of flicking pictures owing to inappropriate video format.

Remote Controller MENU Button→【System Setup 】Menu →【TV out 】→ 【NTSC】*/【PAL】

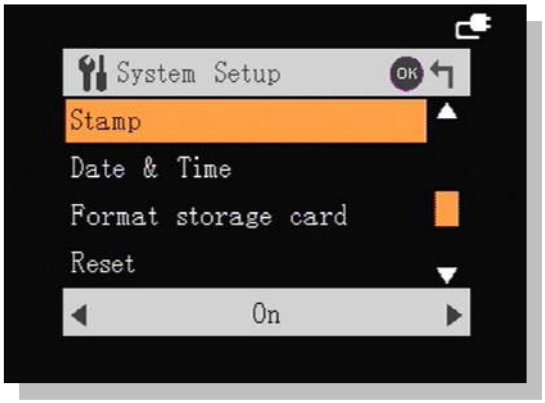
*Setting Value



◆Stamp
Through this function, you can select whether to show time and date during recording.

Remote Controller MENU Button→【System Setup】Menu→【Stamp】→【On】*/【Off】

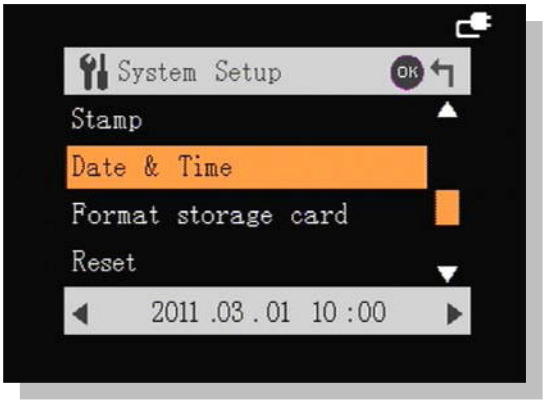
*Setting Value



◆Date & Time

Adjust the current date and time. (Drive recorder with GPS feature will automatically sync the standard date and time after positioning, no setting is required).

Remote Controller MENU Button→【System Setup】 Menu→【Date & Time】→Press "OK" key on Remote Controller to enter setting → Press the remote controller, select Year, Month, Day, Time, Minute→ Press the remote controller ▲▼to adjust values→Press OK Button on the remote controller to save the setting.



◆Format Storage card

This function will delete all data in the memory card including protected data.

When the memory card is used for a long time, too much data will reduce the access efficiency. This function will optimize the access speed of the memory card.

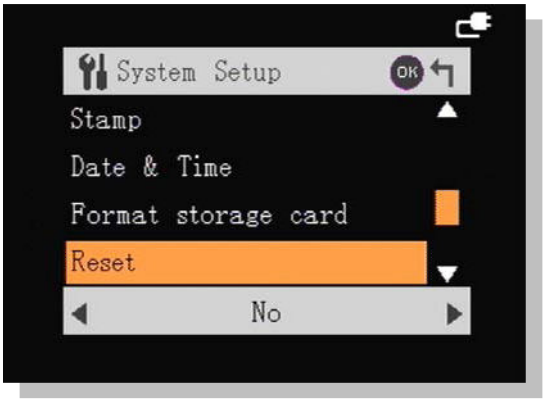
Remote Controller MENU Button→【System Setup】Menu→【Format Storage card】→【No】*/ 【Yes】 →Press OK Button on the remote controller to process

*Setting Value

◆Reset
This function will reset all settings on the drive recorder to default factory settings.

Remote Controller MENU Button→【System Setup】Menu→【Reset】→【No】*/ 【Yes】 →Press OK Button on the remote controller to process

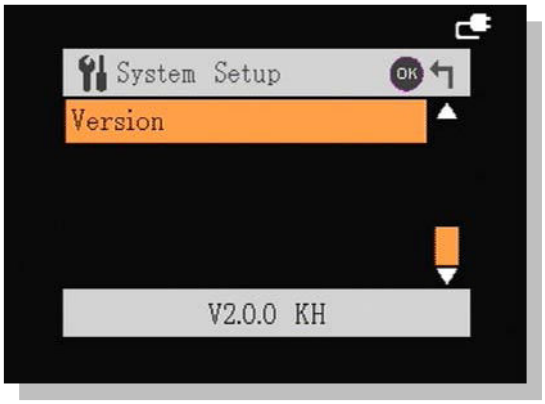
*Setting Value



◆Version
View the firmware version of the drive recorder.

Remote Controller MENU Button→【System Setup】Menu
→【Version】*

*The version number during factory shipment will be considered as the original version.



Language

Use this setting to adjust the menu to your preferred language.

Remote Controller MENU Button→【Language】 Menu→【English】*/【简体中文】/【繁體中文】/【한국의】/【日本語】/【Русский】→Press OK Button on the remote controller to process

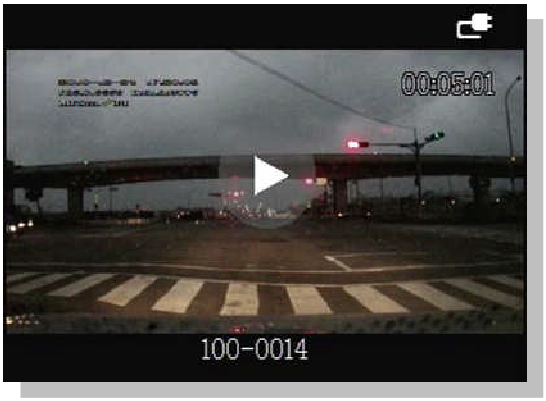
*Setting Value

Playback

Before video playback, please transmit the picture to your monitor (Page12,13), and use the remote controller to operate (Page 08).

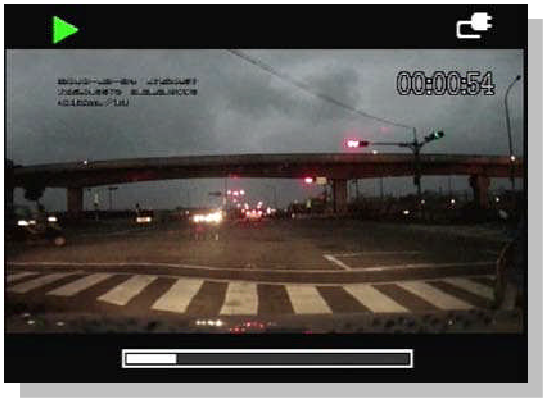
Press playback on remote controller to enter video playback mode.

◆Preview



Up	Normal Play/Tuned Play
Down	Video Index
Left	Previous Clip
Right	Next Clip
OK	Play Video

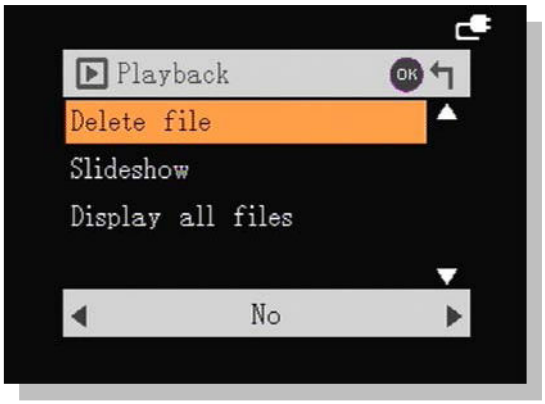
◆Play



Up	Play forward / Play Backward
Down	Stop
Left	Slow Play 1/2X 1/4X 1/8X 1/16X 1/32X
Right	Fast Play 2X 4X 8X 16X 32X
OK	Pause

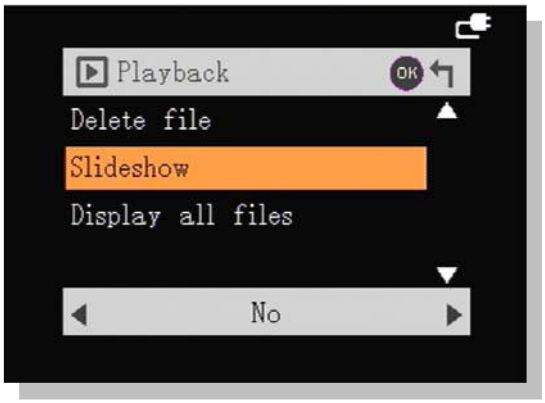
◆Delete file
Delete the single video clip currently selected.

Playback button on the remote controller→Select video with the remote controller→Press Menu button on the remote controller→【Delete file】→【No】/【Delete】→Press OK button on the remote controller to process.



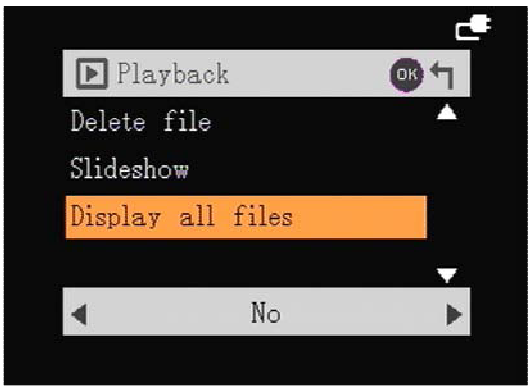
◆Slideshow
Video clips can be played continuously. Setting [1 second] means, after the video is over, it will pause for 1 second before playing the next video clip.

Playback button on the remote controller →Select video clips with the remote controller→Press menu button on the remote controller→【Slideshow】→【No】/【1 second】/【2 seconds】/【3 seconds】/【5 seconds】/【10 seconds】→Press OK button on the remote controller to process.



◆Display all files

During video preview, press ▼key on the remote controller to enter video clips index. Select video clip and press OK key on the remote controller to confirm.



Connecting to PC

· Step 1

Insert the memory card into drive recorder (Page09), and take out the short USB cable provided.

· Step 2

Connect the USB cable with the drive recorder, and connect the other end to the USB port of PC. The red light will start blinking.

· Step 3

Press and hold the USB switch (REC\USB) on the host device for 2~3 seconds to change to USB mode, now the red and blue lights will start blinking simultaneously.

· Step 4

The computer will show a removable disk, you can use this disk for data access in the memory card.

Q&A

Q: Why does the blue light on the drive controller not light up (or sometime)?

A: Please check if your drive recorder has GPS function. Blue light will stay OFF for the host device without GPS function; this is a normal phenomenon. For the host device with GPS function, blue light not lighting up means GPS is positioning. GPS signal will be affected by such factors as weather conditions, tunnels, and basements; the signal might be strong, weak or no signal, and this phenomenon will not affect the function of drive recorder, please be patient or go to open space to complete positioning.

Q: Why does the red light on the drive recorder keep blinking?

A: This is the signal indicating error on the memory card. Please check whether your memory card is installed properly (See page09); otherwise, the data of the memory card is possibly full, please switch on the Recycle Record of the host device (See page24), and press FORMAT button on the host device (See page34) to solve the issue.

Q: How to achieve the best quality resolution?

A:

1. Keep the windshield and the lens clean (Please see page46).
2. Please adjust the following parameters in Image Param (Please see page15).

Video resolution	1920x1080 30P
Digital effect	Vivid
EV	-1.0
Contrast	Hard
Sharpness	Hard

Q: Why doesn't lights of the drive recorder react after inserting the power?

A: Possibly it could be caused by the following circumstances: 1.Vehicle not started. 2. Vehicle power cable falls off, or bad connection. 3. Check if the fuse of the vehicle power is broken. If the abovementioned methods do not solve the problem, please contact our dealer or factory for product repair.

Q: How to play MOV file? Why is there only audio but no video?

A: It is because your computer does not have the encoder needed to play high definition video. Please search "K-Lite Codec Pack" in search engines, download and install the encoder; you will be able to play the file after installation.

Q: How to maintain the lens? Can we use alcohol on it?

A: Please do not use toilet paper, alcohol, stain cleaner, and gasoline, etc. to rub the lens. On the lens is a thin plating film, which is to prevent unnecessary light wave from entering the camera. Improper rubbing will cause tear or scar on the lens.

Please use lens wiper or clothe with minimum clean liquid specified for lens and wipe in concentric circles.

Related Parameters

Light indication guide

Blue light	Red light	Description	Function
◑	◑	blink simultaneously	Memory card is full Memory card not inserted USB mode
◑	◐	blinking alternately	Formatting
◯	----	Constant blue light	GPS positioning completed
----	◑	Red light blinking	Recording
----	◯	Constant red light	Recording stopped

Video Recording Time (For Reference)

	Memory card(GB)			
	1G	2G	4G	8G
1920x1080(30FPS)	17 mins	34 mins	68 mins	136 mins
1440x1080(30FPS)	27 mins	54 mins	108 mins	216 mins
1280x720(30FPS)	34 mins	68 mins	136 mins	272 mins
848x480(60FPS)	35 mins	70 mins	140 mins	280 mins
640x480(30FPS)	105 mins	210 mins	420 mins	840 mins

※Recording time will be different based on different host devices, memory card brands and other settings.

Product Specifications

	GS300	GS600
Sensor	5 Mega pixels CMOS	
Lens	120 degree	
Focus	10cm – infinity	
GPS	NO	Internal antenna
Video output	Mini HDMI: Support 1080i/720p output mode Composite: NTSC/PAL	
Recording format	MOV	
Recording resolution	1920x1080(30fps) 1280x720(30fps) 848x480(60fps)	
Video Codec	H.264	
Recording media	Micro Card(Up to 64GB SDHC Card)	
Laser LED Light	1 PCS	
File protection	YES	
USB	Micro USB	
Battery	Internal(DC 3.7V 190mAh)	
Remote control	YES	
Imposition of date / time on video	YES	
Size	113mm X 24.1mm X 30mm	
Weight	122g	
Nutrition	DC 12-24V	
Working humidity	10%~80%	
Temperature	-10℃~70℃	

※Actual specifications depend on factory announcement. No further notice will be provided in case of any change.